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MASTER OF MILITARY STUDIES

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**PUTTING THE "L" IN MAGTF: ENABLING THE SUCCESS OF MAGTF  
LOGISTICIANS FOR TODAY'S FIGHT AND FUTURE CONFLICT**

SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF MILITARY STUDIES

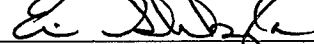
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Date: 12 MARCH 2009

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Date: 12 MARCH 2009

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE <b>2009</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-2009 to 00-00-2009</b>	
4. TITLE AND SUBTITLE <b>Putting the L in MAGTF: Enabling the Success of MAGTF Logisticians for Today's Fight and Future Conflict</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>United States Marine Corps,Command and Staff College, Marine Corps Combat Dev,Marine Corps University, 2076 South Street,Quantico,VA,22134-5068</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES <b>33</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			

## Executive Summary

**Title:** Putting the "L" in MAGTF: Enabling the Success of MAGTF Logisticians for Today's Fight and Future Conflict

**Author:** Major Kirk M. Spangenberg, United States Marine Corps

**Thesis:** Despite recent improvements to certain aspects of logistics training and education, the logistics training and education continuum as a whole continues to suffer from institutional neglect.

**Discussion:** Although efforts have been made to improve aspects of the logistics training and education continuum, the current system is still littered with correctible flaws. A thorough analysis of the capabilities of today's tactical logisticians has revealed a lack of general capability in such areas as planning; command and control operations; Marine Air Ground Task Force (MAGTF), joint, coalition, and interagency integration and unit training management. A lack of available logistics-oriented training and education opportunities for officers contributes to these gaps. Additionally, unit training opportunities for logistics elements continue to lack effectiveness, especially in comparison with the other elements of the MAGTF. Ultimately, a lack of advocacy for logistics training and education lies at the heart of this issue. In particular, the current structure of logistics training and education institutions fails to encourage a holistic approach to the training and education continuum, while at the institutional level; the logistics community demonstrates a lack of serious investment in educating and training its officers.

**Conclusion:** The current logistics training and education continuum is characterized by multiple disparate agencies not acting in concert with each other. The Marine Corps needs to establish a *command* agency responsible for overseeing the professional development of the Logistics Combat Element (LCE) and serve as the LCE's functional training and education center of excellence. In this capacity, this command should act as the higher headquarters for all logistics training and education institutions, wherever they may be in the Marine Corps. This will allow for a holistic approach to training and education, formalized by specific command structure and ownership. This center of excellence needs to be the agency that owns logistics doctrine and training standards and is responsible for their upkeep and maintenance. As such, this agency will be the Marine Corps' principle outlet to and feedback mechanism from the operating forces. In addition, the Marine Corps should further examine and evaluate the entire logistics training and education continuum, as well as officer assignment policy, in order to assist in shaping and improving the creation of the described command. Failing to adequately prepare Marine Corps logisticians to operate in complex operational environments will place the effectiveness of the MAGTF at risk. The cost of inaction is a less capable MAGTF that cannot meet the demanding requirements of future operating environments.

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## **List of Acronyms**

ACE – Aviation Combat Element  
ALOC – Advanced Logistics Operations Course  
C2 – Command and Control  
CLCCC – Combined Logistics Captains Career Course  
CLS – Career Level School  
COC – Combat Operations Center  
CSS – Combat Service Support  
DC I&L – Deputy Commandant for Installations and Logistics  
DLA – Defense Logistics Agency  
EWS – Expeditionary Warfare School  
GCE – Ground Combat Element  
GSOC – Ground Supply Officer Course  
HQMC – Headquarters Marine Corps  
ILS – Intermediate Level School  
ITS – Individual Training Standards  
LCE – Logistics Combat Element  
LOC – Logistics Officer Course  
LOGTECH – Logistics Technology  
LOGTECOE – Logistics Training and Education Center of Excellence  
MAGTF – Marine Air Ground Task Force  
MAWTS – Marine Aviation Weapons and Tactics Squadron  
MCAGCC – Marine Corps Air Ground Combat Center  
MCCSSS – Marine Corps Combat Service Support Schools  
MCLEP – Marine Corps Logistics Education Program  
MCPPI – Marine Corps Planning Process  
MCTOG – Marine Corps Tactics and Operations Group  
MCU – Marine Corps University  
MET – Mission Essential Task  
MOS – Military Occupational Specialty  
MSTP – MAGTF Staff Training Program  
OFEC – Occupational Field Expansion Course  
PME – Professional Military Education  
SOML – School of MAGTF Logistics  
T&E – Training and Education  
T&R – Training and Readiness  
TECOE – Training and Education Center of Excellence  
TECOM – Training and Education Command  
TLOC – Tactical Logistics Operations Course  
TLS – Top Level School  
TTECG – Tactical Training Exercise Control Group  
UTM – Unit Training Management

## Preface

This study examines how the Marine Corps conducts logistics training and education, based in a large part on a study request distributed by the Deputy Commandant for Installations and Logistics. I chose to participate in this study because I passionately believe that this issue has tremendous impact not just on the Marine Corps' logistics community, but rather on the entirety of the MAGTF, because that is what our logisticians support. More capable logisticians (made so by improved education and training) will provide more effective support to the MAGTF as a whole. Given today's fight and the operational environment our leaders tell us to expect in the future, it seems critical to prepare our officers now to handle these challenges. Failing to do so tremendously increases the chances for catastrophic failure in our operations.

It is important to note that while this paper points out several flaws with our education and training institutions, generally speaking the personnel who work at these agencies are dedicated professionals who are doing the best they can within the confines of the current system. Rather, it is the system itself that is flawed and must be corrected at the institutional level.

I would like to acknowledge the advice, counsel, and support I received during this study. First of all, thanks to Brigadier General David Reist for chartering this study and elevating the issue to the institutional level. Appreciation also goes out to the Marine Corps University Foundation for funding my travel in support of my research. In addition, special thanks to Dr. Eric Shibuya, Ph.D., for academic mentorship on this project. Thanks also to Lieutenant Colonel Chris Arantz, a fellow logistician and a mentor, who helped to focus my thoughts and research. Most importantly, thanks to my wife Sallie for her unfailing support and patience.

## **Introduction**

The focus on professional military education and mission-oriented training has been one of the greatest hallmarks of the Marine Corps' success. The Marine Corps as an institution has continually refined training and education programs, to include diversifying into non-resident programs, branching out into joint service and civilian academic institutions, and modernizing and increasing the realism of unit training scenarios. When the 34<sup>th</sup> Commandant of the Marine Corps, General James T. Conway, released his initial guidance, he further emphasized that the Marine Corps "[c]ontinue to develop centers of excellence and formalized training for our ground forces as they increasingly prepare to conduct independent operations at lower levels of command."<sup>1</sup> To that end, the Marine Corps' logistics community began to focus increased energy on evaluating the training and education continuum for its logisticians. This paper will demonstrate that the current construct fails to meet the needs of the operating forces.

Initiatives in new technologies and information systems, reorganization of unit structures, and increases in manpower have begun within the past decade. However, efforts to adapt the training and education continuum to the emerging environment have lagged. This paper will argue that increasing the capability of the Marine Corps' logistics apparatus requires more than segmented, individual initiatives at disparate institutions. It means enabling logisticians to succeed in an increasingly complex operational environment across the spectrum of conflict. This environment will often be characterized by smaller units operating independently across an increasingly deep and diverse battlespace. While the Marine Corps has a number of very talented and capable logisticians who are "making things happen" in the operating forces, their success results primarily from their own individual ingenuity and often heroic efforts. In other words, logisticians who are succeeding in the operating forces are doing so in spite of the



institution, not because of it. *Despite recent improvements to certain aspects of logistics training and education, the logistics training and education continuum as a whole continues to suffer from institutional neglect.* Though this neglect applies to all ranks of logisticians, this paper will focus on the officer corps, primarily at the tactical level of war. To present this position, this paper is organized in five sections. The first section defines the training and education terminology used throughout the paper, the second addresses the training and education institutions as they currently exist, and the third explains what is missing. The fourth presents recommended solutions followed by concluding thoughts in the last section.

### **Continuums and Centers of Excellence Defined**

The Marine Corps distinguishes between the concept of training and the concept of education. Specifically, the Marine Corps defines training as “the conduct of instruction, discipline, or drill; the building in of information and procedures; and the progressive repetition of tasks-the product of which is skill development and proficiency.”<sup>2</sup> In comparison, education is “the process of moral and mental development; the drawing out of students to initiate the learning process and bring their own interpretations and energies to bear-the product of which is a creative mind.”<sup>3</sup> The training and education continuum refers to the concept of applying both of these principals in varying levels throughout a Marine’s career. Early in a Marine’s career, training mostly dominates, but throughout career progression, focus shifts increasingly towards education (See Figure 1. Logistics T&E Continuum for a graphic example).

In order to better manage the training and education continuum, the Marine Corps established a concept known as the Training and Education Center of Excellence (TECOE). The Marine Corps’ definition of a TECOE is:

TECOEs serve as the focus for designated training and education issues within the Marine Corps. Their primary responsibility is the creation, maintenance,

sustainment, and synchronization of the Training and Education Continuum for a particular Military Occupational Specialty (MOS), occupational field, warfighting function, or common military skill. TECOE's provide connectivity between the Operating Forces, Expeditionary Force Development Center (EFDC), Advocates, Marine Corps Systems Command (MCSC), the Marine Corps Warfighting Laboratory (MCWL), and Training and Education Command (TECOM). In concert with these organizations, TECOE's produce timely and relevant solutions for validated training and education requirements resulting from new technology, equipment, organizational changes, or doctrine.<sup>4</sup>

This paper focuses primarily on the functional TECOE's,<sup>5</sup> which are dedicated to specific environments or warfighting functions, such as cold weather operations or logistics, respectively.<sup>6</sup>

### **Current Logistics Training and Education Institutions**

At the institutional level, influence to the logistics training and education continuum begins at Headquarters Marine Corps (HQMC) with the Deputy Commandant for Installations and Logistics (DC I&L). The Logistics Advocacy and Education Section represents the logistics community at the HQMC level. Specifically, this section serves as the occupational field sponsor for logistics MOSs and provides oversight to MOS training programs.<sup>7</sup> This is a general logistics related advocacy and oversight function. However, the specifics of executing education and training fall under the realm of the commanding general of Training and Education Command (TECOM).

TECOM's mission is "To develop, coordinate, resource, execute, and evaluate training and education concepts, policies, plans, and programs to ensure Marines are prepared to meet the challenges of present and future operational environments."<sup>8</sup> Essentially, TECOM is responsible for all things relating to training and education in the Marine Corps. In addition to the staff sections at TECOM that govern individual training standards (ITS) and produce training and readiness (T&R) manuals, three subordinate commands impact the training and education

continuum: Education Command/Marine Corps University (MCU), Training Command, and the MAGTF Training Command at the Marine Corps Air Ground Combat Center (MCAGCC) at Twentynine Palms, California (See Figure 2: TECOM Organizational Chart).

### Training Command

Training Command, as the name implies, focuses on the training portion of the continuum. For the logistics field, this occurs via the Marine Corps Combat Service Support Schools (MCCSSS) at Camp Johnson, North Carolina. MCCSSS is a subordinate command to Training Command. For officers, MCCSSS focuses primarily on the entry level training.

### *Entry Level Training*

A logistician's indoctrination begins with entry level school with the Logistics Officer Course (LOC) or Ground Supply Officer Course (GSOC) at Camp Johnson, NC. Currently, entry level school is the only required skill training for logisticians. The LOC consists of 63 training days covering the areas of logistics (33.5 hours), maintenance management (105 hours), embarkation and strategic mobility (117.5 hours), motor transportation (96 hours), and Combat Service Support (CSS) (72 hours).<sup>9</sup> The course's stated purpose is "To prepare company grade officers for duty in a logistics related billet at the battalion or equivalent level where their responsibilities will encompass logistics, embarkation, combat service support, maintenance management, motor transport operations and maintenance, and command & control."<sup>10</sup>

At GSOC, the 58 training days focus on personnel management, administrative procedures, financial management, requisitioning, property control, combat service support, and logistics planning. This course's stated purpose is "To provide instruction in current supply policies, procedures, and practices.... Students will have a basic understanding of supply procedures and will be able to manage a using unit supply account. In addition they will be

familiar with CSS planning and execution setting up the foundation for an effective MAGTF officer.”<sup>11</sup>

#### *Logistics Training and Education Center of Excellence*

MCCSSS houses four occupational field TECOE (financial management, logistics operations, personnel administration, and material readiness) and one common skills TECOE (water survival).<sup>12</sup> These areas focus primarily on entry level or basic MOS producing training for their respective MOS groups. In addition, in October 2005, MCCSSS was designated as the logistics functional TECOE (LOGTECOE). To that end, MCCSSS established a small LOGTECOE coordination office headed by a civilian employee (retired lieutenant colonel) with a three person staff in an effort to manage the logistics training and education continuum (See Figure 3: LOGTECOE Staffing). This coordination office looks ahead to identify potential new concepts and issues that the school should prepare for and acts as a cross coordinator between the occupational field TECOE.<sup>13</sup> While a new proposed charter for the LOGTECOE was submitted in January 2006, this concept is still under development.

#### Education Command (Marine Corps University)

MCU connects with the logistics training and education continuum via resident Professional Military Education (PME) schools and the School of MAGTF Logistics (SOML). As an academic institution, MCU’s role lies primarily in the education arena, though some limited overlap into training does occur as students practice the Marine Corps Planning Process (MCP). As MCU is an accredited academic institution, certain curriculum standards and requirements apply, to include grading standards and writing assignments.

#### *Resident Professional Military Education*

During resident PME, logistics education occurs primarily at career level school (CLS). At CLS, the students focus primarily at the tactical level of war. Intermediate Level School (ILS) and Top Level School (TLS) delve more into the operational and strategic levels of war, and no MOS specific instruction occurs.

At Expeditionary Warfare School (EWS), the Marine Corps' CLS, students spend a portion of the year separated into occupational field groups for studies specific to their fields. This is known as the Occupational Field Expansion Course (OFEC). During OFEC, students with logistics MOSs focus on doctrinal concepts of tactical logistics, logistics C2, logistics planning, as well as unit training management (UTM) and leadership philosophy at the company level. In addition to the course of instruction, the students participate in a MCPP exercise from the perspective of a LCE staff.<sup>14</sup> Each year, approximately 15 to 16 Marine Corps logisticians attend EWS.<sup>15</sup> While the EWS non-resident program is available for officers who do not attend resident school, the non-resident program does not include an OFEC and therefore no MOS-specific study occurs.

As an alternative to EWS, some logisticians attend the U.S. Army's Combined Logistics Captain's Career Course (CLCCC). CLCCC is a four-month long course designed to prepare the Army's company grade logisticians to serve as company commanders and multifunctional staff officers in the logistics field.<sup>16</sup> CLCCC also addresses UTM and C2 issues, as well as the Army's military decision making process, which is similar to the MCPP. Each year, approximately 18 Marine Corps logisticians attend CLCCC.<sup>17</sup>

#### *The School of MAGTF Logistics (SOML)*

The SOML acts as the lead agent for the Marine Corps logistics education continuum. To do this, SOML conducts three courses: Tactical Logistics Operations Course (TLOC),

Advanced Logistics Operations Course (ALOC), and the Marine Corps Logistics Education Program (MCLEP). Additionally, the SOML also manages the Marine Corps' interface with several external courses to include the Joint Course on Logistics, Multinational Logistics Course, and the Logistics Technology (LOGTECH) course. These courses, however, focus more on the operational and strategic level of war.<sup>18</sup>

The SOML conducts four TLOC courses per year, which roughly mirror the logistics OFEC with the exception of the UTM and leadership philosophy studies. This 10 day resident course trains a total of 220 students per year consisting of gunnery sergeants, warrant officers, first lieutenants, captains, and interagency and international students. Of these 220 students, approximately 64 of them are Marine Corps officer logisticians.<sup>19</sup> TLOC focuses on tactical logistics functions and applying the Marine Corps Planning Process at the Marine Expeditionary Brigade level.<sup>20</sup>

The SOML administers two iterations per year each of ALOC and the MCLEP. ALOC consists of a three week course for field grade officers, Chief Warrant Officers, Master Sergeants and Master Gunnery Sergeants, and interagency and international students (approximately 38 Marine Corps officer logisticians per year<sup>21</sup>). This course focuses on operational level logistics, but delves into the tactical level with a MCPP practical exercise administered by the MAGTF Staff Training Program (MSTP). MCLEP maintains a strategic focus with the study of supply chain management and best practices of academia, industry, and the Department of Defense.<sup>22</sup>

#### MAGTF Training Command

The MAGTF Training Command (MAGTFTC) in Twentynine Palms, California, is a subordinate command of TECOM and is home to the Tactical Training Exercise Control Group (TTECG), whose mission it is to "train and exercise units in the command, control, and

coordination of combined arms in support of maneuver warfare.”<sup>23</sup> Specifically, TTECG administers and evaluates Exercise MOJAVE VIPER, which was designed to provide a mission rehearsal scenario to assess units’ core competencies for full spectrum operations in a combined arms environment before deploying.<sup>24</sup> Essentially, this becomes the capstone exercise for deploying units, the output of which is a thorough assessment of the unit’s level of training. While this exercise originally focused only on GCE units, it recently expanded to include some training and evaluation for LCE units as well. This training will be addressed in the next section.

Subordinate to the MAGTFTC are the Marine Corps Tactics and Operations Group (MCTOG), which is also resident at Twentynine Palms, and the Marine Aviation Weapons and Tactics Squadron (MAWTS) at Yuma, Arizona (See Figure 2: TECOM Organizational Chart). MAWTS is commanded by a colonel and focuses on training aviators in advanced tactics as well as qualifying them to be trainers back at their home units with expertise in Unit Training Management (UTM). Though it is primarily aviation focused, MAWTS has a small department that conducts training for logisticians serving in aviation units.<sup>25</sup> MCTOG, also commanded by a colonel, was created in the summer of 2008 to provide similar instruction for ground combat arms personnel. Specifically, MCTOG provides advanced combined arms and MAGTF operations training, as well as instruction on UTM and training readiness at battalion and regimental levels. In addition, MCTOG helps to synchronize doctrine and training standards for the GCE. While MCTOG’s focus is the GCE, there is a logistician on staff who provides training to logisticians who serve on staffs in GCE units.<sup>26</sup>

### **What Is Missing?**

While the Marine Corps as an institution has recognized the need to transform processes and improve capabilities to meet the demands of warfighters—and has implemented initiatives

along those lines—it has been much slower to pursue increasing the capabilities of the individual logistician through education and training. In fact, efforts to identify and frame the requirement are just beginning.

#### Training and Education Command Gap Analysis

In September of 2008, TECOM, together with input from the operating forces, conducted a gap analysis of the logistics training and education continuum.<sup>27</sup> This analysis points to flaws in both the availability and content of logistics specific education and training. The outputs of the analysis can be synthesized to show gaps in four broad categories: Logistics planning; logistics C2 operations; MAGTF, joint, coalition, and interagency integration; and unit training management.

*Logistics Planning.* In general, Marine logisticians are perceived to be adept at performing logistics tasks, such as conducting resupply operations. However, officers in the Logistics Combat Element appear to be poorly trained in conducting the MCPP for logistics operations.<sup>28</sup> This single gap crosses into almost every other category, as the MCPP is an iterative process that provides a framework for planners to consider all aspects of the operation. In particular, when done thoroughly and properly, the MCPP helps the planner to consider issues pertaining to command relationships and C2 as well as integrating with other elements of the MAGTF and other agencies on the battlefield. Thus, lack of proficiency in the MCPP forms a critical gap in the capabilities of the logistician.

*Logistics Command and Control Operations.* Specifically, this gap refers to performing the duties of an operations officer or working on an operations staff in a combat operations center (COC). While logisticians typically understand and are able to operate the technology of the various command and control systems (the science of C2), they lack the ability or knowledge



to apply these systems to the overall C2 process. In other words, logisticians do not effectively integrate systems and synthesize information to create an effective common operational picture to assist the commander in decision making (the art of C2).<sup>29</sup>

*MAGTF, Joint, Coalition, and Interagency Integration.* This relates to the gap discussed above, as this integration is a C2 function typically performed via the COC. In particular, while logisticians typically conduct logistics operations well, they often lack the ability to effectively operate as a MAGTF by synergistically integrating operations with the other elements. Further, logisticians lack training in operating in a theater logistics environment characterized by the presence of multiple non-standard agencies, such as civilian contractors, field service representatives for specialized equipment, the Defense Logistics Agency (DLA), Army logistics nodes, interagency organizations, and coalition partners. Many of these agencies perform functions that are critical to achieving battlefield sustainment, specifically as they plug in to operational level sustainment pipelines. Because of this, the logistician must understand these agencies and have the ability to coordinate and integrate with them.<sup>30</sup>

*Unit Training Management.* In short, the LCE practices poor UTM. This gap points to the LCE unit's ability to conduct effective training. Specifically, logisticians are not trained on how to effectively create, manage, and implement training programs for their units. Rather, training programs tend to be shaped more by the individual experiences of operations officers or commanders, not assisted by knowledge gained from formal instruction. This capability gap leads to inefficiencies in unit training plans and ultimately has the potential to result in inadequately trained units.<sup>31</sup>

#### Unit Training

Exercise MOJAVE VIPER originally targeted GCE units only, and only recently evolved to include training for LCE units. Currently the MOJAVE VIPER training package for logistics units centers primarily on live fire convoy training, while unit commanders must create their own training packages to fill much of the schedule (in contrast to GCE units, whose schedules are full with evaluated events).<sup>32</sup> Additionally, though TTECG trains six logistics battalions per year, the duties of the logistics section at TTECG are divided between traditional support duties (supporting TTECG logistics requirements) and providing logistics training and assessments to exercise forces. The senior logistician who oversees both of these functions is a major, while the logistics training officer who works for him is a captain. The staff of the logistics section consists of three officers and twelve enlisted personnel. By contrast, at least three lieutenant colonels oversee GCE training, and the staff also includes an aviator lieutenant colonel (though TTECG does not train ACE units).<sup>33</sup> As a result, it is difficult for TTECG to provide a robust and effective training package and unit assessment to the commander (a lieutenant colonel) of LCE exercise units.

Additionally, LCE units attending MOJAVE VIPER experience further challenges due to the fact that many units are only formed to within 50% of their full manning up to a month prior to the exercise. To complicate the issue, many LCE units are also globally sourced, which means they are formed from a composite of geographically dispersed units (for example, a logistics battalion based in Camp Lejeune, North Carolina, may have a transportation company sourced from Camp Pendleton, California or Okinawa, Japan). These units often operate as a fully formed unit for the first time at MOJAVE VIPER and are thus unable to train together with any great significance prior to the exercise. As a result, units are forced to spend time focusing

on basic fundamentals rather than conducting integrated evaluations of unit core competencies. This dramatically reduces the effectiveness of the training and evaluation.<sup>34</sup>

To further complicate LCE unit training, no unit training events or mission essential tasks (METs) are currently listed in the logistics T&R manual. Specifically, the individual training events in the T&R manual each relate directly to these METs. However, the chapters in the logistics T&R manual that list METs and collective (unit) training events are both blank, with a front page that states, “This chapter remains as a placeholder for future use.”<sup>35</sup> To complicate the challenge, the development of standardized core METs for LCE units must consider the multiple different types of units, each with their own multi-functional requirements (See Figure 5: Multifunctional Organization of the LCE for a graphic depiction of multi-functional logistics units). Currently, unit commanders must determine their own core METs and design training to meet them. As a result, a single standard does not exist. This complicates TTECG’s function of training units to core METs, and it injects friction into the LCE’s dealings with other elements of the MAGTF as each LCE unit will function and perform differently.

#### Training and Education Availability

Simply stated, there are not enough logistics oriented training and education opportunities for officers. At the company grade level only 34 logisticians currently attend resident school each year, with an additional 64 attending TLOC. Given the company grade logistician population of 1529 officers, roughly 6.4% of the population attends some sort of resident training each year.<sup>36</sup> Because of this limited availability, it is possible for a logistics officer to never conduct comprehensive practical application on the MCPP, logistics C2, or receive any significant logistics-specific training after entry level school.<sup>37</sup> Even if the logistics officer does attend resident PME, he or she may already have served as a primary staff member with the

requirement to conduct logistics planning and C2. For example, it is quite common for a first or second tour junior captain (in some cases, first lieutenants—especially with current operational tempo) to serve as an infantry battalion S-4, having never attended a formal PME course or TLOC. Thus, the exposure to this instruction actually occurs *after* the officer would have been required to apply it.

Additionally, because attending these courses does not result in any type of certification, supplementary MOS, or link to promotion, there is little institutional incentive to attend. As a result, it is left to the efforts of the individual officer to compete for learning opportunities, often in the face of commanders who may be reluctant to release low-density officers for weeks at a time. This speaks to the institutional mindset of looking out for the career development of subordinates. For example, a commander may be willing to suffer from the absence of key leaders while they attend the Staff Noncommissioned Officer Academy—even though this may mean a gap in a key billet for six weeks—due to its direct influence on promotion opportunities and eligibility. Because the logistics courses contain no such bearing on promotion, the incentive to allow low density officers to attend due to career development and promotion does not exist.

#### Institutional Advocacy

Ultimately, the flaws in the training and education continuum are symptoms of a larger issue in the Marine Corps' logistics community: lack of unified advocacy for training and education. This lack detracts from a holistic approach and greater institutional investment in logistics training and education.

#### *Holistic Approach to Training and Education*

Currently, the alignment of institutions under disparate organizations does not lend itself to a holistic approach to training and education. Specifically, there is a training continuum and an education continuum, each managed by separate and unlinked organizations, but there is no actual unified training and education continuum holistically managed by a single institution. MCCSSS manages training while the SOML manages education, and though the two agencies may develop relationships, they each work for their own respective commands with disparate agendas and separate pipelines to advocacy. While both organizations ultimately fall under the umbrella of TECOM, the distance (both physical and relational) between the two is great, and any relationship between the two organizations is informal. This lack of a formal and specified connection between the training and education continuums leads to the two sides not being synchronized and coordinated.

While the MCCSSS LOGTECOE has been chartered with the intent of providing this holistic approach, currently it is not truly equipped to perform this function. To begin with, it is staffed with only four civilian employees who have the added responsibility of overseeing the four occupational field TECOE's and one commons skills TECOE resident at MCCSSS.<sup>38</sup> Therefore, the LOGTECOE necessarily focuses primarily on occupational field training issues, rather than the holistic approach required of a functional TECOE (See Figure 4: MCCSSS LOGTECOE Relationships). From a command relationship standpoint, the MCCSSS LOGTECOE falls under Training Command and therefore has no actual ownership of the educational institutions. Rather, the coordination office must develop informal relationships and conduct liaison with various agencies in an effort to manage the entire T&E continuum. In addition, the commander of MCCSSS also serves as the installation commander for Camp Johnson and is responsible for the installation as well as administrative support to several tenant

agencies. This is further complicated by the fact that the principal focus of MCCSSS as stated in its mission statement is to conduct formal resident training in the occupational fields represented at the school.<sup>39</sup> The command's mission and span of control therefore directs it to focus primarily on entry level MOS producing or basic skill instruction, limiting the command's ability to take a holistic approach to the logistics T&E continuum.

This disconnect between training and education contributes significantly to the major gaps as identified by the TECOM gap analysis. While on the surface it may seem inconsequential to have training separate from education, the challenge arises when certain key topics cross boundaries between the two. In particular, the art of command and control and the effective use of the MCPP involve both education and training. Both topics require skill and proficiency in certain tasks (training), but both also require critical thinking and creative minds to be effectively employed and integrated into operations (education). However, as these topics involve neither entirely education nor entirely training, neither element of the continuum fully owns them. The TECOM gap analysis demonstrates the resulting effects to the operating forces.

#### *Institutional Investment in Training and Education*

Although some improvements can certainly be seen, ultimately the Marine Corps has demonstrated a lack of true, serious investment in this arena. Rather, the Marine Corps has placed the preponderance of the responsibility on the operating forces and individual Marines rather than institutionally driving the T&E continuum. This manifests itself first at HQMC, where the Logistics Advocacy and Education Section is staffed with only one major.<sup>40</sup> Further, due to the lack of standardized METs and collective tasks in the T&R manual, unit commanders must develop and drive their own training without the assistance of institutional standards. This

contributes to a lack of effective core MET based training events for LCE units, particularly at the capstone pre-deployment event of Exercise MOJAVE VIPER.

Further, this lack of investment is evidenced by the level of manning that the Marine Corps contributes to logistics T&E institutions. This paper has already demonstrated that the portion of the staff of TTECG that is dedicated to logistics training lacks an appropriate level of staffing to provide effective training and assessments. The level does not demonstrate parity with the portions of the staff representing the other elements of the MAGTF or even the commander of the training unit. The MCCSSS LOGTECOE also demonstrates this lack of investment, as it is staffed entirely by just four civilian employees. This shows that the community has not deemed it important enough to assign any active duty officers or senior enlisted personnel.

These manning trends can be compared with those of the GCE and ACE communities. TTECG, MAWTS, and MCTOG are all command screened billets filled by colonels in their respective communities. For example, TTECG is commanded by a combat veteran who took command after his tour as the commander the Multi-National Forces West main effort unit in Iraq, clearly a highly regarded position.<sup>41</sup> Additionally, when creating MCTOG, the GCE community provided approximately 60 personnel to staff the organization (2 of whom form the logistics section), while MAWTS is staffed with 217 personnel, 97 of whom are Marine officers.<sup>42</sup> This level of institutional investment by the other elements of the MAGTF towards their own overall capability development highlights the lack of the same from the logistics community.

### **Recommendations**

This paper has demonstrated that the Marine Corps' logistics training and education continuum has suffered from institutional neglect. What then, is the way forward? This paper argues that the way forward includes both immediate action and additional study.

#### Immediate Action

The current logistics training and education continuum is characterized by multiple disparate agencies not acting in concert with each other. The Marine Corps needs to establish a *command* agency whose function it is to oversee the capability development through education and training of the LCE. This command should belong to TECOM and serve as the LCE's functional training and education center of excellence and the process owner for the logistics training and education continuum. In this capacity, this command should act as the higher headquarters for all logistics training and education institutions, wherever they may be in the Marine Corps. In other words, MCCSSS, SOML, and EWS OFEC—or the functions those agencies currently perform—should be owned by this command. This will allow for a unified approach to training and education, formalized by specific command structure and ownership. In addition, this center of excellence needs to be the agency that owns logistics doctrine and training standards and is responsible for their upkeep and maintenance. As such, this agency will be DC I&L's principle outlet to and feedback mechanism from the operating forces. This agency must be commanded at the colonel level (a formal command screened billet), staffed by highly qualified individuals and seen as positive for their careers.

#### Additional Study

In addition to the action described above, the Marine Corps should further examine and evaluate the entire logistics training and education continuum, as well as officer assignment



policy, in order to assist in shaping and improving the creation of the command described. Three specific focus areas will help to round out this examination.

First, the logistics TECOE concept must be examined within the context of the logistics community, including current curriculums, manning structures, and how it interfaces with other elements of the continuum in order to effectively integrate training and education initiatives and programs. This study should focus on entry level instruction for officers, how this instruction feeds into subsequent programs, and the ability of a centralized organization to oversee and administer the program. Secondly, the role of MCU resident and non-resident education (EWS, Command and Staff College, and the SOML) must be examined. Specifically, this study should focus on the career and intermediate level logistician, and how training and education at this level connects with the overall continuum. Finally, unit collective training must be evaluated. This study should focus on existing institutional unit training capabilities, specifically the role of the MAGTF training center at Twentynine Palms, California. Collective training standards and mission essential tasks must be evaluated, with particular emphasis on how they are managed and reviewed. Additionally, this study should examine the model used by the ACE and GCE to determine their applicability to LCE units.

In addition to these three focus areas, the Marine Corps must examine officer assignment policy and how logistics training and education is qualified and incentivized. In particular, the value of a supplementary MOS of MAGTF Logistician with specific training and education requirements for certification should be considered. Tying qualifications to a recorded MOS, and potentially to assignment and promotion, adds concrete standards that a logistician must achieve, not only providing incentives for the officer and his leadership, but also forcing the

institution to provide the additional resident and non-resident training and education opportunities. This idea and its implications on assignment policy should be examined in detail.

## **Conclusion**

The Marine Corps' logistics apparatus has made great strides in the past decade, but the work is not complete. The training and education continuum has continued to lag behind in the overall transformation effort. Given the environment described in Vision & Strategy 2025, the Marine Corps must develop MAGTF logisticians capable of functioning in complex operational environments characterized by distributed logistics and independent small unit operations across the spectrum of conflict. This complex operating environment of the future will increasingly rely on a robust, flexible, responsive, and sustainable logistics apparatus capable of operating from a sea base with minimal buildup ashore. As stated in Vision and Strategy 2025, "The emerging security environment generates hard requirements for lighter and leaner forces, capable of being effectively sustained over a greater distance."<sup>43</sup>

It is clear that the existing status quo in the training and education continuum does not effectively prepare logisticians now. In the complex environment of future conflict, the shortfalls and gaps described in this paper will be magnified exponentially. Failing to adequately prepare our logisticians to operate in this environment places the lethality, flexibility, agility, and effectiveness of the MAGTF at risk. In his planning guidance, the 34<sup>th</sup> Commandant of the Marine Corps states that we must "[a]ssess the health of PME programs, take advantage of recent studies on the subject, and make recommendations for reorganization, resourcing, and adjusting throughput that will ensure our intellectual readiness."<sup>44</sup> The cost of inaction is a less capable MAGTF that cannot meet the demanding requirements of future operating environments.

- <sup>1</sup> General James T. Conway, 34<sup>th</sup> *Commandant of the Marine Corps Commandant's Planning Guidance*. (Washington, DC: Headquarters, U.S. Marine Corps, 2006), 10.
- <sup>2</sup> Commandant of the Marine Corps, *The Marine Corps Training and Education System*. MCO 1553.1B. (Washington, DC: Headquarters, U.S. Marine Corps, May 24, 1991), 1.
- <sup>3</sup> Ibid, 1.
- <sup>4</sup> U.S. Marine Corps Training and Education Command, *Training and Education Centers of Excellence (TECOE)*. TECOM Order 5420.1 with Change 1 (Washington, DC: U. S. Marine Corps, Feb 10, 2005), 1
- <sup>5</sup> The MOS / occupational field TECOEs focus on the training continuum for particular MOS or occupational field, such as the Personnel Administration TECOE at Camp Johnson, North Carolina, that involves the training of all Marines in the various MOSs of the personnel administration field. Common skills TECOEs concentrate on specific areas of the Marine Corps Common Skills Program, such as marksmanship, that are applicable to all Marines of any MOS.
- <sup>6</sup> U.S. Marine Corps Training and Education Command, *Training and Education Centers of Excellence (TECOE)*. TECOM Order 5420.1 with Change 1 (Washington, DC: U. S. Marine Corps, Feb 10, 2005), 2
- <sup>7</sup> [http://www.marines.mil/units/hqmc/logistics/Pages/LPC3\\_Logistics\\_Advocacy\\_and\\_Education\\_Section.aspx](http://www.marines.mil/units/hqmc/logistics/Pages/LPC3_Logistics_Advocacy_and_Education_Section.aspx) (Accessed 20090204).
- <sup>8</sup> <http://www.tecom.usmc.mil/> (Accessed February 4, 2009).
- <sup>9</sup> U.S. Marine Corps, Marine Corps Combat Service Support Schools, *0402 & 3002 Entry Level Officer Brief*, July 2008.
- <sup>10</sup> Ibid.
- <sup>11</sup> Ibid.
- <sup>12</sup> <http://www.lejeune.usmc.mil/mccsss/tecoe/tecoe.shtml> (Accessed 20090210).
- <sup>13</sup> U.S. Marine Corps, Marine Corps Combat Service Support Schools, *Logistics Training and Education Center of Excellence Brief* 22 July 2008. Also see Kevin M. Barth. "Logistics Training and Education Center of Excellence." *Marine Corps Gazette* (June 2007): 54-57.
- <sup>14</sup> U.S. Marine Corps, School of MAGTF Logistics, *TLOC – EWS OFEC Comparison Brief*, Date unknown.
- <sup>15</sup> <http://www.mcu.usmc.mil/mcu/factbook/MCU%20Factbook%202008-2009.pdf> (Accessed February 10, 2009).
- <sup>16</sup> Major Chris Palfi, USA, *Combined Logistics Captains Career Course Brief*, date unknown.
- <sup>17</sup> Captain Daniel Rosenberg, USMC, telephone conversation with author, February 11, 2009.
- <sup>18</sup> Lieutenant Colonel Jeffrey L. Manning, USMC, *School of MAGTF Logistics Command Brief*, date unknown.
- <sup>19</sup> <https://www.intranet.tecom.usmc.mil/sites/SOML/TLOC/default.aspx> (Accessed February 11, 2009).
- <sup>20</sup> Lieutenant Colonel Jeffrey L. Manning, USMC, *School of MAGTF Logistics Command Brief*, date unknown.
- <sup>21</sup> <https://www.intranet.tecom.usmc.mil/sites/SOML/ALOC/webpages/Class%20Composition.ppt>. (Accessed February 11, 2009).
- <sup>22</sup> Lieutenant Colonel Jeffrey L. Manning, USMC, *School of MAGTF Logistics Command Brief*, date unknown.
- <sup>23</sup> <http://www.29palms.usmc.mil/base/tecg/> (Accessed February 10, 2009).
- <sup>24</sup> <http://www.29palms.usmc.mil/base/tecg/director.asp> (Accessed February 10, 2009).
- <sup>25</sup> Major Ryan Anderson, interview with author, January 28, 2009.
- <sup>26</sup> Headquarters U.S. Marine Corps. *United States Marine Corps Concepts and Programs 2008*, (Washington, D.C: Headquarters Marine Corps, 2008), 216. Also, Major Tim Roberson, interview with author, January 28, 2009.
- <sup>27</sup> Brigadier General Melvin Speise and Lieutenant Colonel William Wroten Jr., *Logistics Training and Education Gaps: TECOM Analysis Brief*, September 23, 2008.
- <sup>28</sup> LtCol William Wroten Jr., interview with author February 5, 2009.
- <sup>29</sup> Ibid.
- <sup>30</sup> Ibid.
- <sup>31</sup> Ibid.
- <sup>32</sup> United States Marine Corps, Tactical Training and Exercise Control Group, *LCE "Evolved" MOJAVE VIPER Exercise Overview Brief*, November 2008.
- <sup>33</sup> Major Randall Pape, interview with author, January 28, 2009. Also see United States Marine Corps, Tactical Training and Exercise Control Group, *LCE "Evolved" MOJAVE VIPER Exercise Overview Brief*, November 2008.
- <sup>34</sup> Major Randall Pape, interview with author, January 28, 2009.
- <sup>35</sup> Headquarters U.S. Marine Corps, *Logistics Training and Readiness Manual*, NAVMC 3500.27. (Washington, DC: U.S. Marine Corps, August 21, 2007), 2-1, 3-1.
- <sup>36</sup> Captain Daniel Rosenberg, USMC, telephone conversation with author, February 11, 2009.

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<sup>37</sup> While the non-resident programs that the majority of officers conduct provide basic instruction on MCPP and C2, there is not significant capability for comprehensive practical application, especially when the non-resident programs are completed individually vice in a seminar. Additionally, non-resident programs do not address the specifics of how these concepts apply to the logistics field, as they do not include OFEC.

<sup>38</sup> United States Marine Corps, Marine Corps Combat Service Support Schools, *Logistics Training and Education Center of Excellence Brief*, 22 July 2008. Also see Kevin M. Barth. "Logistics Training and Education Center of Excellence." *Marine Corps Gazette* (June 2007): 54-57.

<sup>39</sup> <http://www.lejeune.usmc.mil/mccsss/index.shtml> (Accessed February 10, 2009).

<sup>40</sup> Major Sam Davis, USMC, conversation with the author, February 4, 2009.

<sup>41</sup> <http://www.29palms.usmc.mil/base/ttecg/director.asp>, Accessed February 12, 2009.

<sup>42</sup> Major Tim Roberson, USMC, interview with author, January 29, 2009. Also, Captain Robert Walker, USMC, interview with author, January 28, 2009.

<sup>43</sup> United States Marine Corps, *Vision & Strategy 2025*. (Washington, DC: Headquarters, U.S. Marine Corps, June 18, 2008): 43.

<sup>44</sup> General James T. Conway, 34<sup>th</sup> *Commandant of the Marine Corps Commandant's Planning Guidance*. (Washington, DC: Headquarters, U.S. Marine Corps, 2006), 10.

## APPENDIX 1: FIGURES

# Logistics T&E Continuum

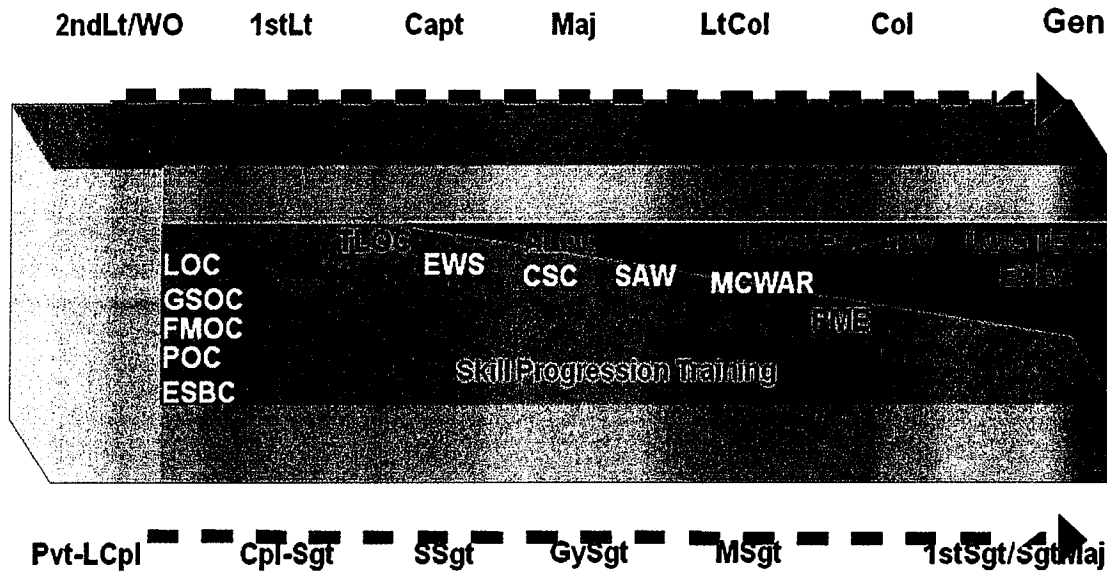


Figure 1. Logistics T&E Continuum

Source: Logistics Training and Education Center of Excellence Brief v4, July 22, 2008

## Training and Education Command (TECOM)

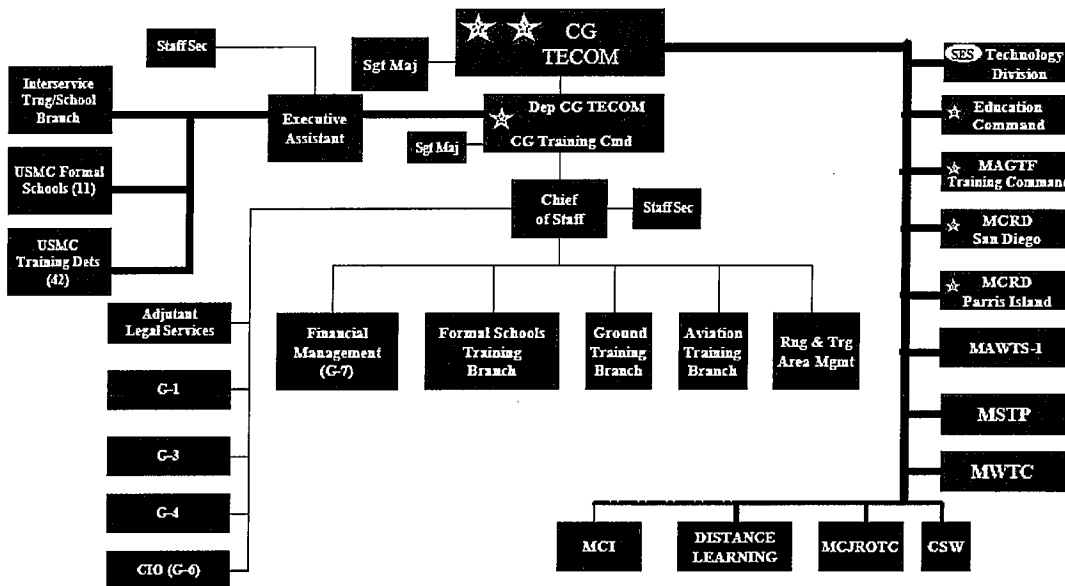


Figure 2: TECOM Organizational Chart

Source: <http://www.tecom.usmc.mil/TECOMorg.pdf> Accessed 20090210

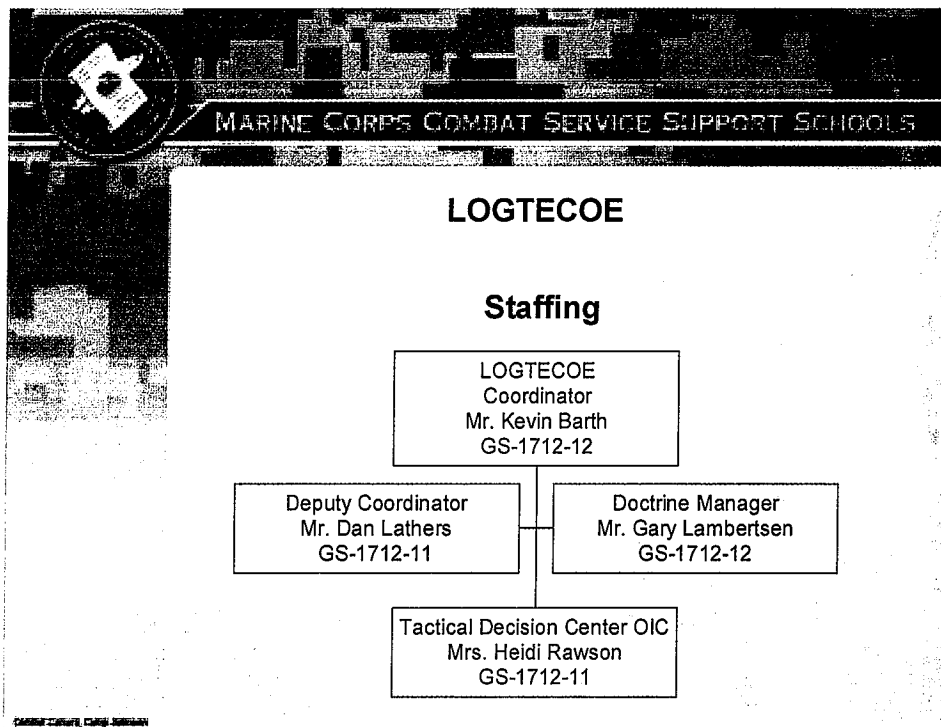


Figure 3: LOGTECOE Staffing

Source: Logistics Training and Education Center of Excellence Brief v3 July 2008



## MCCSSS LOGTECOE Relationships

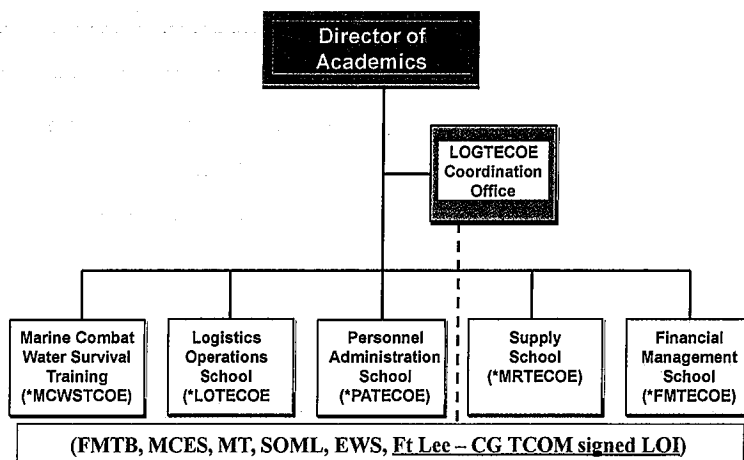
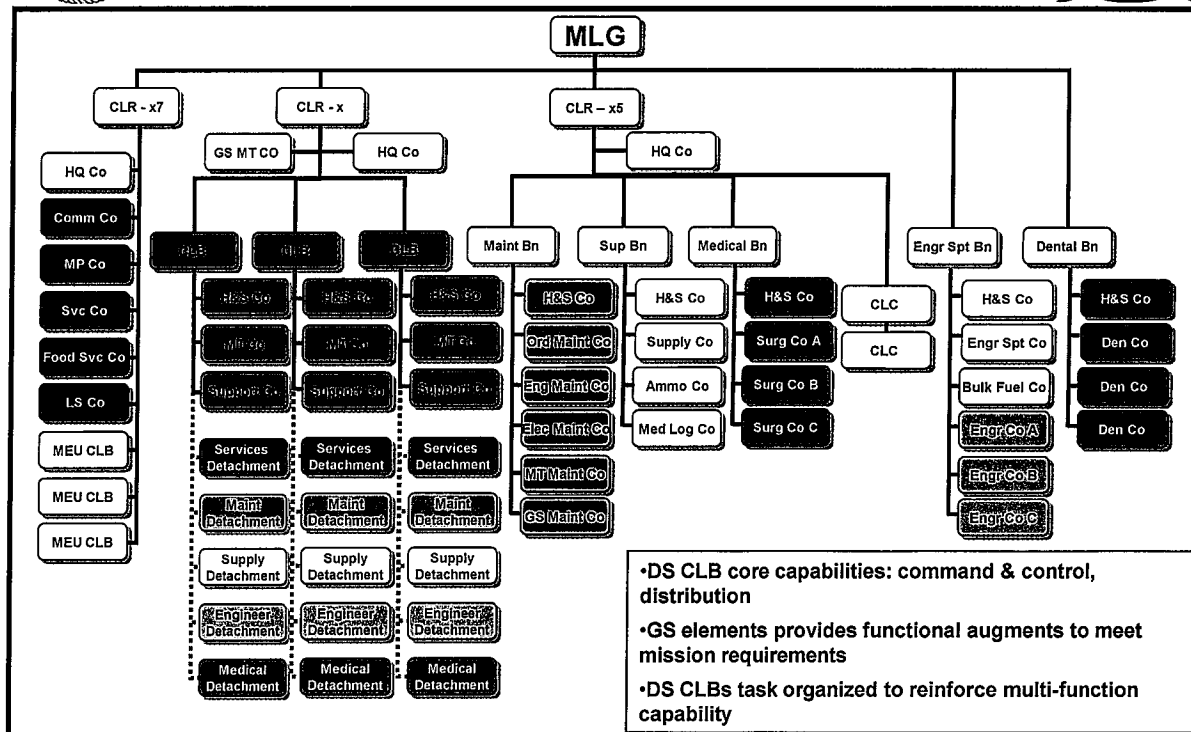


Figure 4: MCCSSS LOGTECOE Relationships

Source: Logistics Training and Education Center of Excellence Brief v4 22 July 08



## Task Organization of the Direct Support CLB



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Figure 5: Multifunctional Organization of the LCE

Source: United States Marine Corps, Logistics Vision and Strategy Branch (LPV), Installations and Logistics, Reorganization of the Marine Logistics Group Brief, February, 2008.

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